

U.S. Patent Application No. 10/689,755  
Amendment dated September 12, 2007  
Reply to Office Action of June 13, 2007

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REMARKS/ARGUMENTS

Reconsideration and continued examination of the above-identified application are respectfully requested.

Claims 1-11 are pending. Claims 1, 4, and 5 have been amended. Support for the amendments to the claims can be found throughout the originally-filed specification, drawings, and claims, including, for instance, at page 7, lines 3-22; at page 8, lines 9-25; and in Figs. 2 and 10. Accordingly, support for this amendment exists and no questions of new matter arise. Entry of this amendment is respectfully requested.

**Rejection of claims 1, 4, and 5 under 35 U.S.C. §103(a) – Yamagata in view of Official Notice**

At page 2, item 2 of the Office Action, the Examiner rejects claims 1, 4, and 5 under 35 U.S.C. §103(a) as being obvious over Yamagata (U.S. Patent No. 6,021,222) in view of Official Notice. The Office Action admits that Yamagata fails to disclose or suggest detection of edges of a work-piece, and relies upon Official Notice to cure the deficiencies of Yamagata. This rejection is respectfully traversed.

Claim 1 recites an image processing apparatus, including features of an "edge window setting unit for an edge window for detecting an edge of a workpiece," and an "element setting unit for selectively setting a plurality of window elements in the one edge window set by said edge window setting unit." Claim 1 includes further features of an "edge detection unit for scanning each of the window elements and obtaining edges every each the window element," and a "calculation unit for obtaining an edge related information from the edges detected by said edge detection unit." According to embodiments, a user of an apparatus as recited in claim 1 can thereby use an element setting unit to selectively set a plurality of "window elements" in one

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edge window used for detecting a workpiece. Neither Yamagata, the Official Notice, nor their combination, even if the Official Notice and combination of Yamagata were proper, discloses or suggests an overall image processing apparatus as claimed in claim 1, including features of an "element setting unit."

Yamagata relates to a pattern recognition system, and particularly to a pattern recognition system designed to locate the edges of a circular object, using known edge filters (a Sobel operator). Yamagata is more specifically directed to pattern recognition of circles in a document to locate areas of interest having that shape, such as a confidential stamp or seal on the document. (See, e.g., Yamagata Col. 2, lines 30-41). Yamagata discloses the use of filter blocks (illustrated as A, B, and C in Fig. 4A of Yamagata) to detect a circular or other shape in the document.

The Office Action equates the edges of such filter blocks with the recited "edge window" of claim 1. The Office Action indicates that the set of rectangular pixels (shown with intensity values in the breakout of Fig. 4A) contained in each such window shown in Yamagata constitute "window elements." Applicant respectfully traverses the suggestion that the collection of pixels within filter blocks (A, B, and C) reflect a set of "window elements."

Claim 1 includes features that the "element setting unit" is for "selectively setting a plurality of window elements in the one edge window set by said edge window setting unit." Even if the rectangular pixels of Yamagata represented "window elements," Yamagata does not include any suggestion that window elements can be "selectively" set. Instead, once a window has been accepted in the system of Yamagata, there is nothing that can be "selectively" set, adjusted, or manipulated within that filtering frame. Rather, a fixed rectangular set of pixels is apparently defined automatically in that reference, in order to provide desired input to the Sobel operator. Neither Yamagata nor the Official Notice discloses or suggests an apparatus including an "element

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setting unit" having the recited features of window elements that can be set on a selective basis. For these reasons alone, this rejection should be withdrawn.

Applicant, moreover, traverses the purported taking of Official Notice of the application of image processing techniques as taught by Yamagata to a "workpiece" as recited in claim 1. Applicant traverses the suggestion that applying the document circle-detector of Yamagata to workpiece detection would be sufficiently routine to justify taking "official notice" of that combined feature. Applicant respectfully submits that the Office Action has applied the document circle-detector of Yamagata to a "workpiece" without demonstrating a linkage between those two uses, whose purposes and application are significantly different. Applicant therefore submits that the Official Notice therefore represents mere hindsight in light of applicant's claimed invention. The rejection of claim 1 should be withdrawn, for these further reasons considered alone.

Independent claims 4 and 5 recite a record medium and method containing similar recited features as claim 1. Claims 4 and 5 distinguish over Yamagata and the Official Notice for at least the same reasons as claim 1, and the rejection of claims 4 and 5 should be similarly withdrawn.

**Rejection of claims 2, 3, 6, and 7-11 under 35 U.S.C. §103(a) – Yamagata in view of Official Notice and Lopez et al.**

At page 3, item 3 of the Office Action, the Examiner rejects claims 2, 3, 6, and 7-11 under 35 U.S.C. §103(a) as being obvious over Yamagata in view of Official Notice of workpiece imaging, and further in view of Lopez et al. (U.S. Patent No. 6,148,117). This rejection is respectfully traversed.

The Office Action admits that Yamagata and the Official Notice do not disclose or suggest having the user select various parameters of filtering processes, and cites Lopez et al. to cure the deficiencies. Claims 2, 3, 6, and 7-11 depend variously from claims 1 and 5, and distinguish over

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Yamagata combined with the Official Notice, even if combination were proper, for at least the same reasons as claims 1 and 5, from which they respectively depend. Lopez et al. discloses an image processing system with an alterable local convolution kernel, but describes no more of the overall image processing apparatus, record medium, or method as discussed above in connection with claims 1, 4, and 5. Claims 2, 3, 6, and 7-11 therefore distinguish over Yamagata, the Official Notice, and Lopez et al., even if combination were proper, and the rejection of those claims should be withdrawn.

**CONCLUSION**

In view of the foregoing remarks, the applicant respectfully requests the reconsideration of this application and the timely allowance of the pending claims.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0925. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,



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